# Crops, Soils and Fertilizers

CONDUCTED BY B. W. KILGORE, State Chemist North Carolina Department of Agriculture and Director Agricultural Experiment Station. Inquiries of Progressive Farmer readers cheerfully an-

#### LUCERNE AND THE CLOVERS.

### Some Critical Comments on the Different Varieties by a Farmer of 60 Years' Experience.

Messrs. Editors: From present indications am to get more letters asking for information about lucerne and the clovers than I am able to answer; so I will put it all in one, and ask you to publish it in your valuable paper, of which those persons are subscribers, as more would read it.

For red clover I prepare the land as I do for turnips. The red clover land should be prepared like you do wheat, sowing broadcast and harrow lightly. Don't sow on land infested by crab grass, but sow on land that has been preceded by a clean crop the year before, for no crop will grow with crab grass. Sow about 9 or 10 pounds to the acre, which you can do by waving the hand across your breast, opening with the forefinger, and a brisk walk, will give you about that quantity—say 9 pounds. Sow early in April, and let it grow without any interference the first year unless crab grass gets into it.

The same preparation will do for lucerne (alfalfa). This may be moved when it gets a foot high, and then every time it gets a foot and a half high, say every thirty days, as long as you live and your children. This habit increases its value. We have no crop that will equal it, giving one to two tons of first-class hay every thirty days, of which all animals are fond, and eat with avidity. While red clover is very valuable and yields well, you can get but one crop of hay a year. You must make the lucerne land very rich. can't give it too much, stable and lot manure preferred.

scale, but my stock refused to eat it whether green or cured. The same may be said of mellilotus, which looks like it might be called big clover, as it was when I first saw it. A friend sent me a quart of seed from the fine lands of Alabama, but as my stock refused to eat it, I soon gave it up.

I have never grown crimson clover. It is a beautiful crop, but being an annual, I preferred the red clover, which wants renovating once in five years.

We have the burr or yellow clover, which grows luxuriantly in fall and winter, and with bermuda grass makes the best of pasture, one for summer the other for winter. Horses are not very fond of the burr clover, but will eat it very well in winter. Bermuda grass beats them all either for grazing or mowing, when properly treated. It yields well, and will bear more moving than any other grass, and will feed more stock. It will bear mowing twice a year. Makes the best of hay. Although lucerne will live a life time, yet it will not bear treading over by heavy animals, cows and

The red clover and lucerne seed may be had both in Augusta, Dr. Alexander, or the Woods in Richmond, Va., both 25 to 30 cents, perhaps less, a pound. I think six pounds will sow onehalf an acre.

This is intended for an answer to R. M. Claffy Fort Mills, S. C., and I. P. Person, Welford Station, Spartanburg Co., S. C. I have moved red clover twice a year, but the second crop will salivate horses and mules, but let it fall on the ground to re-seed itself. With my best wishes for your health and success, I am,

Truly yours,

J. WASHINGTON WATTS. Mountville, S. C.

#### How Partridges Saved His Corn.

Messrs. Editors: I am a farmer, and one that has made a success on the farm so far, and I have studied the farm as closely as any man. I experiment on something every year. I won the first premium at the State Fair this year from a one-horse farm. But what tempted me to write this letter was reading Mr. T. A. Lowder's letter in your last issue arguing that the partridges ought to be strictly protected by law. Five years ago I had wheat and corn joining in the same field. The chinch bug got in my wheat and killed some of it before it matured, and after it was cut and the stubble was dry the chinch bug took to my corn. I killed bugs for five days, and it looked like the more I killed the more came, and so I gave it up. But while I was killing bugs I noticed a covey of birds would come every day where the wheat was, and I thought at first they were after the wheat. So they were; but they took to the bugs after I had given them up, and they destroyed the bugs and saved my corn with the exception of about five rows next to the wheat where the bugs killed before the partridges could make any headway on them.

Durham Co., N. C.

#### Increasing Corn Production.

J. D. RAGAN.

Anyone who has been to the St. Louis Fair must have been impressed by the marvels of corn -its overflowing production, its adaptability to a hundred uses, as shown in varied exhibits. Illinois, Iowa and Missouri have devoted the same intelligent attention to corn as Pittsburg has to steel. In spite of the great advance in breeding it, and the huge crop of this year, the Agricultural Department declares that our average production per acre could be doubled within a few years. In a recent publication, the Bureau of Plant Industry describes a farm in Pennsylvania on which 100 bushels of corn per acre have been produced for the last decade. The owner turns clover sod under in the autumn and then mixes it well into the soil the next spring. He practices I have not tried vetch except on a very small systematic seed selection and also frequent shallow cultivation in a manner suited to conserve the soil moisture, and says that with average rainfall during the winter and early spring, he can raise a fair crop without any rain from planting time until harvest. Like methods, the Bureau declares, would bring like results in any section of our country; but whether such an increase of production would not mean such low prices as to make the whole crop unprofitable, is not stated. W. H. TODD.

## Catawba Farmers Ship Peas and Potatoes.

Mr. W. J. Shuford, of the Hickory Milling Company, is enterprising and alert always. He has built up a great business in peas. By giving the farmers of the Hickory section a first-class cash market for any sort of pea he has built up a large trade in peas. He furnishes the seed and directs the growing and handling of certain varieties. He will ship out of his county the coming season about \$25,000 worth of peas. That is not a mean sum for a side crop. The farmers of Catawba have learned to classify their peas. A lot of mixed peas will bring 70 cents a bushel when the best quality of pea readily sells for \$1.20. The varieties most popular are the Improved Whippoorwill, the New Era, the Small Lady, the Large Black Eye, the Clay, the Black, the Speckled Crowder, the Calico, the Red Ripper, and the Wonderful. The demand for peas comes from New Orleans to New York and from Charleston to Seattle.

The sweet potato business grows in Catawba. Hickory, Newton and Conover are large shipping points. One acre of good land will produce 300 bushels, and the average price is 50 cents if the potatoes are kept till spring. Something like 20,000 bushels will be shipped from Hickory next

spring. It is no wonder that the Catawba farmers are in good circumstances. The banks of Newton and Hickory could bear eloquent testimony to the condition of the tiller of the soil. Truly, this is the day of horny handed sons of toil.-H. E. C. B., in Charlotte Observer.

# The Japanese Persimmon.

Messrs. Editors:-It seems that the Japanese persimmon, several varieties of which were introduced by the Department of Agriculture into the Southern States, is a fruit which we have never learned how to eat. It sells fairly well as a fancy fruit in the Northern markets, but it is not supposed to be ripe until it is so soft as to be a perfect mush. This, of course, makes it a very poor shipper. Its perishable qualities kill it commercially. It is just learned by the Department of Agriculture that the Japanese have a way of treating the persimmon when it is hard and firm so as to take away the green, puckery taste. This makes it a very different and yet delicious fruit, crisp and firm like an apple, and a good shipper. This opens up a new and promising vista for the Japanese persimmon. The tree is semi-hardy, has a wide range over the South and is a prolific bearer. There are dozens of varieties ranging in size from a pullet's egg to a large tomato. The meat of some is golden yellow, while that of others is a deep blood red. The young wood can be easily transferred onto the native Virginia persimmon stock which is found all over the South. GUY E. MITCHELL.

#### Sow One Acre of Wheat this Way.

Messrs. Editors:—You will not all be done sowing wheat when this comes to hand, kind readers, and I want all farmers that are done to sow one acre more this way:

Break up your land with a two-mule grab plow as deep as can be rulled by them; then sow onehalf bushel of choice grain wheat to the acre and twelve bushels of good cotton seed to the same; then plow this in with a small grab plow with one mule. Be sure to sow your grain evenly, having your ground-or I should have said, your rowsperfectly level.

You know that this small grab will leave no water furrow. But when you finish plowing in this wheat, take a small straight shovel, run off in lands, say ten feet wide, not more than twelve in width. Run these furrows deep so they will hold the surplus water that will be through the winter months; and these same furrows will prove two advantages: one in very wet weather and the other in very dry weather. This you all can understand; as those furrows will hold the water when the wheat most needs it late in the spring.

The rule of cotton seed to the acre, and also wheat, is owing to the cotton that land will make to the acre. For instance, if your land makes six hundred pounds to the acre, put twelve bushels, and if it makes twelve hundred pounds to the acre, put twenty-four bushels, and so on. But never put more than two bushels of good wheat to the acre.

Now, Mr. Editor, I can only talk to you and the farmers through the press; and I will say that the farmer that fails to take your paper another year will be standing in his own light. United we stand, divided we fall. I was an Allianceman for twelve years, and am yet from the sole of my foot to the crown of my head; and so is my old woman. We did more good the time that we were in session than all the wars that ever have been fought. This is all that I have to say at this time. W. R. HAYES.

Harmony, S. C.

Some of our farmers, having learned how to make good butter, are finding a profitable market for all they can produce. In all such cases the profit is greater than that made by the dairyman who has to buy a large portion of his feed. Slowly the bad reputation attached to "country butter" is being improved. It will be a long time before country butter will be uniformly good, because there are, and always will be, farmers who think they know all about butter-making and always did. But progressive farmers, who keep posted, are learning how to make butter that sells the year round for twenty-five cents per pound. and customers prefer it to creamery butter an account of superior freshness.-Farm and Ranch.